Supplementary Information for

Dog domestication and the dual dispersal of people and dogs into the Americas.

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Supplementary text Figure S1

Supplementary Information Text

BEAST Tip Dated Skyline Phylogeny. A Bayesian Skyline Phylogeny with dated tips was computed using BEAST 2.4 (1) to estimate split dates in the dog/wolf phylogeny in Ameen et al. (2). Ameen and colleagues used a minimum threshold of 10X mean coverage for the bayesian analysis. The Bayesian phylogeny contained a reference panel of published dogs from (2–4) (Figure S1). The tree generated by BEAST was visualised using Maximum Clade Credibility tree type in TreeAnnotator v1.8.3 using a 10% burnin (2). Annotations of the node ages for the phylogeny estimated with BEAST by Ameen et al. were added for this manuscript from the original analysis.

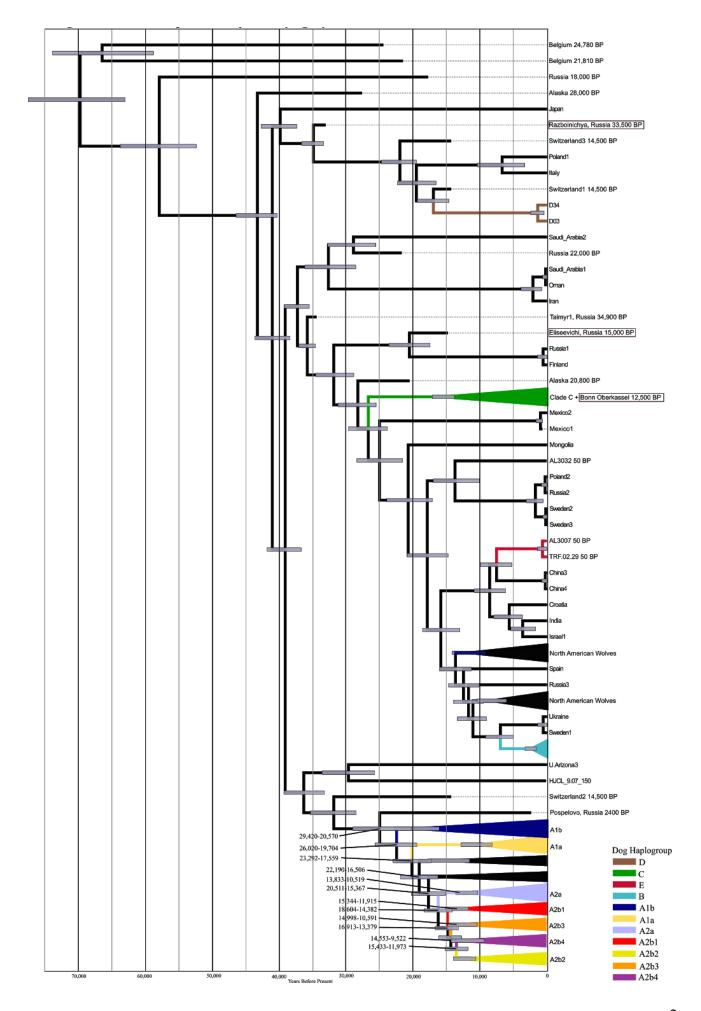


Fig. S1. BEAST Tip Dated Skyline Phylogeny, annotated phylogeny from Ameen et al 2019 with nodes labelled with 95% confidence intervals for age of split. A coyote (*Canis latrans*) outgroup was used to root the tree, this individual and two grey wolves (*Canis lupus*) from Tibet were removed from the figure for the purpose of visibility as a result of their basal positions. Each of the distinct dog clades, and the subclades of dog Clade A, are colored according to the legend. The nodes splitting these clades from wolves or other dog clades are labelled with the 95% confidence intervals for age of the split in years before present (BP) (2). All ancient samples are labelled with their radiocarbon or archaeologically-estimated age, the Pleistocene canids purported to be dogs are indicated with a box around the label.

SI References

- 1. R. Bouckaert, *et al.*, BEAST 2: a software platform for Bayesian evolutionary analysis. *PLoS Comput. Biol.* **10**, e1003537 (2014).
- 2. C. Ameen, *et al.*, Specialized sledge dogs accompanied Inuit dispersal across the North American Arctic. *Proc. Biol. Sci.* **286**, 20191929 (2019).
- 3. O. Thalmann, *et al.*, Complete mitochondrial genomes of ancient canids suggest a European origin of domestic dogs. *Science* **342**, 871–874 (2013).
- 4. M. Ní Leathlobhair, et al., The evolutionary history of dogs in the Americas. Science 361, 81–85 (2018).